

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Shikio YOSHIDA et al.  
Appl. No.: NEW Group: Unassigned  
Filed: April 14, 2004 Examiner: Unassigned  
For: WIRELESS TRANSMISSION MODULE

INFORMATION DISCLOSURE STATEMENT  
(SUBMISSION CONCURRENT WITH THE  
FILING OF A NEW PATENT APPLICATION)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

April 14, 2004

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

II. COPIES

- a. ☐ This application was filed before June 30, 2003. Accordingly, submitted herewith is a legible copy of (i) each U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- b. ☒ This application was filed on or after June 30, 2003. Accordingly, copies of cited US patents and patent application publications therefore are not included. Copies of foreign patent documents and non-patent literature are included.

- c. ☐ This application is a National Phase of a PCT application. Some or all of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should be forwarded from the International Search Authority. If copies are needed, please contact the undersigned.

III. CONCISE EXPLANATION OF THE RELEVANCE  
(check at least one box)

- a. ☐ **DOCUMENTS IN THE ENGLISH LANGUAGE**

The patents, publications, or other information listed on the attached PTO 1449 are in the English language and therefore, do not require a statement of relevancy.

- b. ☒ **DOCUMENTS NOT IN THE ENGLISH LANGUAGE**

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

An English language Abstract is provided for the document not listed in the English language, thereby satisfying the relevancy requirements.

- c. ☐ **ENGLISH LANGUAGE SEARCH REPORT**

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(III)(A)(3).

- d. ☒ **OTHER**

The following additional information is provided for the Examiner's consideration.

Enclosed is an on-line article entitled:  
"2.4 GHz Wireless LAN PC Card"

Also, enclosed is a Statement with Comments on both references.

FEES

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 02-2448.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 

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TCB/msh  
2936-0216PUS1

Attachment(s): ☒ Form PTO-1449(s)  
☒ Documents  
☐ Foreign Search Report  
☐ Fee  
☐ Other: \_\_\_\_\_

(Rev. 02/12/2004)

Form PTO-1449	ATTY. DOCKET NO. 2936-0216PUS1	APPLICATION NO. NEW
<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  (Use several sheets if necessary)	APPLICANT Shikio YOSHIDA et al.	
	FILING DATE April 14, 2004	GROUP

### U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	Kind	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE

### FOREIGN PATENT DOCUMENTS

	Office	DOCUMENT NUMBER	Kind	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
								YES	NO
	JP	2001-028560	A	2001-01-30	JAPAN			ABS	

**OTHER DOCUMENTS** (Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.)

	An on-line article "2.4 GHz/5 GHz Wireless LAN PC Card," browsed on the Internet on February 21, 2003, posted at: <URL <a href="http://www.ecat.sony.co.jp/vaio/acc/acc.cfm?pd=10556">http://www.ecat.sony.co.jp/vaio/acc/acc.cfm?pd=10556</a> >

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## **MATERIAL FOR INFORMATION DISCLOSURE STATEMENT**

**(Our Ref.: T-160)**

### List of Prior Art References

- A. Japanese Patent Application Laid-Open No. 2001-28560,  
laid-open on January 30, 2001
- B. An on-line article "2.4 GHz / 5 GHz Wireless LAN PC Card,"  
browsed on the Internet on February 21, 2003,  
posted at <URL <http://www.ecat.sony.co.jp/vaio/acc/acc.cfm?pd=10556>>

### Comments

#### **Reference A**

This reference discloses a mobile communication terminal provided with pole-shaped antennas that protrude perpendicularly from one of the main faces of the mobile communication terminal. This gives the mobile communication terminal a shape that is difficult to carry around.

By contrast, according to the present invention, a wireless transmission/reception card has a pole-shaped antenna for wireless transmission and reception, and the length direction of the pole-shaped antenna is substantially parallel to the main faces of the card. As a result, the wireless transmission/reception card according to the invention is flat-plate-shaped as a whole, and is thus excellently portable.

#### **Reference B**

This article discloses a wireless LAN card having antennas arranged in the interior of the card. This makes it difficult to obtain high antenna gains in all directions through 360 degrees in the horizontal plane in the normal use state.

By contrast, according to the present invention, a wireless transmission/reception card has a pole-shaped antenna for wireless transmission and reception, and the length direction of the pole-shaped antenna is substantially parallel to the main faces of the card. Moreover, this wireless transmission/reception card is so designed that, when it is mounted on a particular appliance (for example, a headset), its pole-shaped antenna is kept upright substantially in the vertical direction. This makes it possible to obtain high antenna gains in all directions through 360 degrees in the horizontal plane in the normal use state.